

Abstract of the Disclosure

The sequence of a target polynucleotide can be determined by: (i) contacting the target polynucleotide with a polymerase enzyme and one of the nucleotides A, T(U), G, and C under conditions suitable for the polymerase reaction to proceed; (ii) measuring the time taken for the polymerase to bind to and subsequently dissociate from the target polynucleotide, to thereby  
5 determine whether the polymerase has incorporated the nucleotide onto the target polynucleotide; (iii) optionally repeating steps (i) and (ii) with additional nucleotides, to thereby identify the sequence of the target polynucleotide.